

Amendments to the Claims

Please amend the claims as shown in the following listing of claims. This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1. (Currently Amended) A stent graft suitable for placement at a vascular treatment site, the stent graft comprising:

at least one stent having a proximal end and a distal end and having a lumen extending therethrough between the proximal and distal ends, the stent graft placeable at the vascular treatment site such that the proximal end of the at least one stent is located upstream of the distal end of the at least one stent, the distal end of the at least one stent providing a distal, outflow end of the stent graft through which blood flowing through the stent graft can exit the stent graft, and

a covering of collagen having an isolated extracellular matrix layer that becomes remodeled by host tissue, secured to the at least one stent and extending therealong between the proximal and distal ends, wherein the covering is a sleeve that initially has a length about equal to twice the length of the at least one stent, a first portion of the sleeve extends along and complements inside surface of the at least one stent, and a second portion of the sleeve is folded back over a proximal end of the at least one stent and then along an outside surface of the at least one stent to the distal end thereof, and wherein the first portion and the second portion of the sleeve are secured to at least the distal end of the at least one stent.

2. (Cancelled)

3. (Currently Amended) A stent graft suitable for placement at a vascular treatment site, the stent graft comprising:

at least one stent having a proximal end and a distal end and having a lumen extending therethrough between the proximal and distal ends; and

a covering of collagen having an isolated extracellular matrix layer that becomes remodeled by host tissue, secured to the at least one stent and extending therealong between the proximal and distal ends, wherein the covering is a sleeve that initially has a length about equal to twice the length of the at least one stent, a first portion of the sleeve extends along and

complements inside surface of the at least one stent, and a second portion of the sleeve is folded back over a proximal end of the at least one stent and then along an outside surface of the at least one stent to the distal end thereof, wherein the stent graft further comprising a plurality of stents connected together to form a stent frame with lumens of the respective stents coaligned to form a common continuous lumen extending from a distal stent frame end to a proximal stent frame end, and the covering extending therealong between the proximal and distal stent frame ends, the stent graft placeable at the vascular treatment site such that the proximal stent frame end is located upstream of the distal stent frame end, the distal stent frame end providing a distal, outflow end of the stent graft through which blood flowing through the stent graft can exit the stent graft.

4. (Original) The stent graft of claim 3, wherein the stent frame has eyelets at the proximal and distal ends.

5. (Original) The stent graft of claim 4, wherein the covering is sutured to the stent frame using a filament of biocompatible material that extends through the eyelets.

6. (Original) The stent graft of claim 3, wherein each of said plurality of stents has eyelets at proximal and distal ends thereof, and the covering is sutured to the stent frame using a filament of biocompatible material that extends through the eyelets.

7. (Original) The stent graft of claim 1, wherein the covering is secured to the at least one stent at locations along the stent using a filament of biocompatible material, the locations being adapted to secure the filament in position against movement axially with respect to the stent during deployment at a treatment site of a patient.

8. (Original) The stent graft of claim 1, wherein the covering is a sleeve of small intestine submucosa material.

9. (Original) The stent graft of claim 8, wherein the sleeve is defined by connecting together along a seam, opposite edges of at least one flat tissue of the small intestine submucosa material.

Claims 10-11 (Cancelled)

12. (Previously Presented) A stent graft device comprising:
a stent frame defining only a single lumen extending from a first end of said stent graft device to a second end of said stent graft device;
said stent frame having a proximal end and a distal end, said stent frame provided by a single stent or by a plurality of stents connected together with lumens of the respective stents coaligned to form a common continuous lumen;
a covering of collagen secured to the stent frame, said covering of collagen having an isolated extracellular matrix layer that becomes remodeled by host tissue; and
wherein the covering is a sleeve having a single lumen therethrough, the sleeve has a length about equal to twice the length of the stent frame, a first portion of the sleeve extends along and complements inside surface of the stent frame, and a second portion of the sleeve is folded back over the proximal end of the stent frame and then along an outside surface of the stent frame to the distal end of the stent frame, and wherein the first portion and the second portion of the sleeve are secured to at least the distal end of the stent frame.

13. (Previously Presented) The stent graft device of claim 12, wherein the stent frame has eyelets at the proximal and distal ends.

14. (Previously Presented) The stent graft of claim 13, wherein the covering is sutured to the stent frame using a filament of biocompatible material that extends through the eyelets.

15. (Previously Presented) The stent graft device of claim 12, wherein the stent frame is provided by a plurality of stents connected together, and wherein each of said plurality of stents has eyelets at proximal and distal ends thereof and the covering is sutured to the stent frame using a filament of biocompatible material that extends through the eyelets.

16. (Previously Presented) The stent graft device of claim 12, wherein the covering is secured to the stent frame at locations along the stent frame using a filament of biocompatible

material, the locations being adapted to secure the filament in position against movement axially with respect to the stent frame during deployment at a treatment site of a patient.

17. (Previously Presented) The stent graft device of claim 12, wherein the covering is a sleeve of small intestine submucosa material.

18. (Previously Presented) The stent graft device of claim 17, wherein the sleeve is defined by connecting together along a seam, opposite edges of at least one flat tissue of the small intestine submucosa material.

19. (New) A stent graft delivery apparatus, comprising:
a transluminally advancable delivery device having a lumen communicating with a distal, open end; and
an expandable stent graft having a first condition suitable for positioning the stent graft in the delivery sheath lumen for delivery to a vascular treatment site and a second, expanded condition adapted for deployment at the treatment site, the stent graft comprising:
at least one stent having a proximal end and a distal end and having a lumen extending therethrough between the proximal and distal ends; and
a covering of collagen having an isolated extracellular matrix layer that becomes remodeled by host tissue, secured to the at least one stent and extending therealong between the proximal and distal ends, wherein the covering is a sleeve that initially has a length about equal to twice the length of the at least one stent, a first portion of the sleeve extends along and complements inside surface of the at least one stent, and a second portion of the sleeve is folded back over a proximal end of the at least one stent and then along an outside surface of the at least one stent to the distal end thereof, and wherein the first portion and the second portion of the sleeve are secured to at least the distal end of the at least one stent,
wherein the stent graft is positionable in the delivery device lumen such that upon deployment from the lumen at the vascular treatment site the proximal end of the at least one stent is located upstream of the distal end of the at least one stent.